

The specimen we received from Dr. Lockhart is  $1\frac{3}{8}$  inch long. The head is olive, with a short dark-edged white streak from the middle of the hinder edge of the eye, and from the upper hinder edge of the eye a longer dark-edged white streak, which is forked behind; the upper branch extends along the side of the neck, and the lower one over the tympanum; on the other side of the head the upper line is interrupted and broken into three parts.

*Dumerilia madagascariensis.*

The British Museum has just received the skeleton of an adult freshwater tortoise from Anuavandra (on the west coast of Madagascar), which has been named *Dumerilia madagascariensis* by Grandidier. It has been arranged with *Pelomedusa*. It belongs to the tribe *Peltocephalina* of the family Peltocephalidæ, which is essentially a South-American family, this genus being the only exception. It chiefly differs from the genus *Peltocephalus* in having, according to M. Grandidier (for, of course, they are not to be seen in the skeleton), two short beards on the chin, which are entirely wanting in that genus, and two series of oblique lunate shields on the outer surface of the tail. The alveolar surface of the upper jaw is broad, with an angular ridge near and parallel to the sharply acute outer margin. The alveolar surface of the lower jaw is narrow in front, much broader behind, with a rather convex ridge, becoming broader behind, occupying a great part of its surface, and with a groove parallel and quite close to the outer edge.

The head is like that of *Peltocephalus*, but is more depressed and the crown flat and broad. The nose is shorter, and the lower jaw not with such an acute point; and the upper jaw is not so sinuated in front. The frontal plate is hexangular, elongated behind; and the temporal plates are large and meeting in the centre behind the frontal one, whereas in *Peltocephalus* the central plate is very large and separates the temporals to the occiput; but in other respects the two genera are very similar. It is a much smaller species, the shell of the adult animal being only 12 inches long.

BIBLIOGRAPHICAL NOTICES.

*Records of the Rocks; or Notes on the Geology, Natural History, and Antiquities of North and South Wales, Devon, and Cornwall.* By the Rev. W. S. SYMONDS, F.G.S. &c. 8vo. London, 1872.

THE author says, "This book . . . is written for amateurs who, like myself, enjoy passing their leisure hours among rocks, old castles, old authors, and the wild flowers of strange wayside places. It does

not assume to be a strictly scientific description of the geological structure of the different tracts of country to which it alludes; but I trust it is correct as far as it goes." It begins with a general petrographico-geological introduction, and proceeds with a dilettante account of the districts mentioned in the titlepage, with the successive geological formations as the basis for a systematic collocation of every thing the author finds cause to put together, in a pleasant talky style, from his note-books and his memory, from his geological text-books and local guide-books, his county-histories and his library in general, but more especially from the late Sir Roderick Murchison's standard work 'SILURIA.'

In fact the 'Records of the Rocks' may be succinctly described as consisting of 'Siluria' deeply diluted with antiquarian gossip, folklore, local botany, and recent geological notings, the prominent personage in that book being replaced by the *ego* and his friends in this. It is garnished with 82 woodcuts, of which 62 have been taken bodily, descriptions and all, from 'Siluria' without any special references, but noticed generally in the preface only as an enrichment for Mr. Symonds's volume.

Although fully appreciating the advantage to the amateur geologist, whether indoor or out, of his having in his guide-book or book of reference such good illustrations as those transferred from 'Siluria' to this general itinerary and field-book for Mr. Symonds's favourite districts, we must regret that their respective relationships with the original are not carefully acknowledged by proper indications, and that their transference is not in every case unaccompanied with avoidable mistakes.

Printed in good legible type, and with little pretence of indicating technical words, this book is intended for easy-going amateurs "round the Wrekin," and will serve them for a pleasant book of reference. The geologist, too, will find much readable information here and there throughout its pages, if he cares to winnow it out from among country-seats and personal history—such as the *résumé* of the Cambrian rocks and fossils at one end, and of the bone-caves at the other, also of the Drift observed in the Woolhope Valley (p. 165), &c. There is, however, quite sufficient to bear out the author's statement that the book is not strictly scientific. Thus the woodcut at p. 72 and its description are transferred from 'Siluria' without the corrections from the list of *errata* of that work, and the cut at p. 215, with the old references, instead of new ones to Mr. Woodward's perfect monograph; the description of the cut at p. 261, modified by an idea taken from the page opposite the cut in 'Siluria,' carries more than the exact truth; at p. 271 the asterisk left under the cut finds its meaning only in 'Siluria;' at p. 281 the name of fig. 1 has not been corrected, whilst the new name of fig. 2 is indicated by an initial only. The supposition that *Sequoia* is a "fir" (p. 289), and the making Mr. Lankester hold a fossil fish in two genera at once (p. 184), are weak points; and the misprints of names of fossils are too frequent,—as "Palæopyge," "Bowmannii," "aspermus," "Illænus," "hemispherica," "Platychisma," "Euglypha

cardiola," "Paleaster," "Brodei," "Cronchii," "erenistra." We imagine that "Heterostracon" and "Osteostracon Cephaspidæ" (p. 219) should be either English, Heterostracous and Osteostracous Cephalaspids, or properly converted into the Latin form.

The guidance of the Author, of Mr. Jones, gardener at Builth, and other good people, is recommended *passim* to the reader; and papers in the 'Geological Magazine' and other useful periodicals are cited for information old and new: but why the only perfect geological work on North Wales (Geol. Surv. Mem. vol. iii.), the real basis of Mr. Symonds's country, should not have been kept well before the reader, and why the guidance of the Geological Surveyors should have been so little thought of, it is difficult to conjecture.

We have thus pointed out several matters for improvement in this well-intentioned book, which we hope will be required in a new edition. Written by one who has known his country-side, with cultivated intelligence and an eye for nature, for many years, and who has long enjoyed the companionship of good observers, thinkers, and writers, the Rev. Mr. Symonds's 'Records of the Rocks,' like his other writings, is directed, with a good and useful aim, to the advance of knowledge among the so-called "educated," but frequently little-informed, class of society. It is a learned and comprehensive guide-book, thoroughly imbued with a love of nature in her many aspects, and with a desire that all should benefit by an intelligent recognition of the natural sciences and by scientific pursuits.

*A Manual of Palæontology for the Use of Students, with a General Introduction on the Principles of Palæontology.* By H. A. NICHOLSON, M.D., D.Sc., &c. Svo. Edinburgh, 1872.

SCHOOLS and colleges now find themselves better provided with zoological and palæontological text-books than heretofore. Dr. Nicholson's 'Manual of Palæontology' has several good points. Though very comprehensive it is not too diffuse (only to Graptolites, a favourite subject, are a few extra pages given); it keeps the conditions of fossilization and geological succession well before the reader (especially in Parts I. and IV.)—and treats the Vertebrate remains less in detail than the Invertebrate, in accordance with the larger acquaintance the student has usually to make with the latter than with the former.

Part III., on fossil Plants, treated of as the successive floras of geological periods, is a useful addition to the palæozoology, and is carefully worked as far as it goes; but unaccountably it makes no mention of the Diatomaceæ and the Calciferous Algæ (*Lithothamnium* &c.), which, like *Chara*, play such an important part in the constitution of many strata.

The author judiciously handles fossils of obscure affinities, such as *Stromatopora*, *Receptaculites*, *Crossopodia*, &c. But a study of Mr. Albany Hancock's memoir "on Vermiform Fossils," in the 'Annals of Natural History' for 1858, would have enlightened him on the nature of the last-mentioned fossil and its innumerable allies, in-